

Application Serial No. 10/776,838  
Date September 10, 2006  
Reply to Office Action dated August 10, 2006

Page 2 of 15

**Listing of the Claims:**

1. (Currently Amended) A hand-held power operated band saw manipulable by hand so as to be movable in relation to a work piece for performing a cutting [[a]] operation on the work piece with a closed loop saw blade having a substantially continuous cutting edge on at least one edge of the saw blade, the saw blade movable in a path defined by the closed loop during the cutting operation, comprising in combination:

- a frame assembly;
- a handle assembly extending from said frame assembly;
- a motor assembly having a drive shaft and mounted to said frame assembly;
- a drive wheel assembly connected to said drive shaft of said motor assembly;
- a driven wheel assembly journaled to said frame assembly distant from said drive wheel, said drive wheel and said driven wheel adapted to support a continuous loop blade thereon; and
- a blade break assembly mounted to said frame assembly.

2. (Original) The hand-held power saw as defined in claim 1, further comprising a battery pack detachably coupled to the hand-held power saw for providing power to said motor assembly.

3. (Original) The hand-held power saw as defined in claim 1, further comprising a guide assembly attached to said frame for orienting a section of the continuous loop blade at an angle within five degrees of said acute angle said handle assembly is relative to said frame assembly.

Application Serial No. 10/776,838  
Date September 10, 2006  
Reply to Office Action dated August 10, 2006

Page 3 of 15

4. (Previously Presented) The hand-held power saw as defined in claim 1, further comprising an assembly connected to said driven wheel assembly for moving said driven wheel assembly between a first and a second position relative to said drive wheel assembly.

5. (Original) The hand-held power saw as defined in claim 1, further comprising a fence depending from said frame assembly for resting against the work piece being cut.

6. (Original) The hand-held power saw as defined in claim 1, further comprising a switch assembly operably interconnecting said battery pack to said motor assembly.

7. (Original) The hand-held power saw as defined in claim 1, wherein said frame assembly comprises a first and a second end, and a throat area intermediate said first and second end along a longitudinal edge opposite said handle assembly.

8. (Original) The hand-held power saw as defined in claim 1, wherein said handle assembly comprises an integral portion of said frame assembly.

9. (Original) The hand-held power saw as defined in claim 1, wherein said handle assembly comprises a D-shaped handle attached to said frame assembly.

10. (Original) The hand-held power saw as defined in claim 1, wherein said handle assembly comprises an L-shaped member attached to said frame assembly.

11. (Previously Presented) The hand-held power saw as defined in claim 1, wherein said handle assembly is adapted to receive a battery pack.

Application Serial No. 10/776,838  
Date September 10, 2006  
Reply to Office Action dated August 10, 2006

Page 4 of 15

12. (Original) The hand-held power saw as defined in claim 1, wherein said motor assembly comprises:

- a motor housing;
- a motor disposed within said housing and having an output shaft;
- a transmission coupled to said output shaft of said motor and having a drive shaft; and
- a gear assembly attached to a free end of said drive shaft.

13. (Original) The hand-held power saw as defined in claim 1, wherein said drive wheel assembly comprises:

- a pulley journaled to said frame assembly; and
- a driven gear connected to said pulley and adapted to be engaged by said motor assembly.

14. (Currently Amended) The hand-held power saw as defined in claim 3, wherein said guide assembly comprises:

- a first and a second guide arm each having a first end attached to said frame assembly and a second end proximate said section of the continuous loop blade; and

at least one bearing member attached to said second end of each of said first and second guide arm adapted to engage at least one side of the continuous loop blade.

15. (Currently Amended) The hand-held power saw as defined in claim 4, wherein said assembly for moving said driven wheel comprises:

- a carriage slidably disposed within said frame assembly and journaled to said driven wheel assembly;

Application Serial No. 10/776,838  
Date September 10, 2006  
Reply to Office Action dated August 10, 2006

Page 5 of 15

a biasing member disposed between an end of said carriage and said frame assembly for urging said carriage toward one end of said frame assembly;  
a cam member engaging an end of said carriage opposite that engaging said biasing member; and  
a handle attached to said cam member for rotating said cam member and moving said carriage between a first and a second position.

16. (Currently Amended) A hand-held power operated band saw manipulable by hand so as to be movable in relation to a work piece for performing a cutting [[a]] operation on the work piece using a continuous closed loop saw blade having a substantially continuous cutting edge on at least one edge of the saw blade, the saw blade movable in a path defined by the closed loop during the cutting operation comprising:

a frame having a first and a second end;  
a throat defined within said frame intermediate said first end and said second end for receiving at least a portion of the work piece;  
a driven wheel journaled to said frame;  
a drive wheel journaled to said frame and spaced from said driven wheel, said drive wheel supporting the continuous loop blade;  
a motor assembly coupled in drive relationship to said drive wheel; and  
a handle assembly extending from said frame intermediate said first and said second ends and substantially opposite said throat, said handle assembly oriented at an angle relative to said frame such that a section of the continuous loop blade spanning said throat lies in a plane generally parallel to said handle assembly.

17. (Original) The saw as defined in claim 16, further comprising a power supply coupled to said handle assembly.

Application Serial No. 10/776,838  
Date September 10, 2006  
Reply to Office Action dated August 10, 2006

Page 6 of 15

18. (Original) The saw as defined in claim 16, further comprising at least one blade guide assembly mounted within said throat for orienting said section of the continuous loop blade generally parallel to said handle assembly.

19. (Original) The saw as defined in claim 16, further comprising a blade tensioning assembly connecting said driven wheel to said frame.

20. (Original) The saw as defined in claim 16, further comprising a skirt depending substantially around said frame.

21. (Original) The saw as defined in claim 16, further comprising a fence connected to one portion of said throat for engaging the work piece.

22. (Original) The saw as defined in claim 17, wherein said power supply comprises at least one of a battery pack and an electrical cord.

23. (Previously Presented) The saw as defined in claim 18, wherein said at least one blade guide assembly comprises a bracket attached to said frame, and at least one bearing attached to an end of said bracket for engaging at least one side of the continuous looped blade.

24. (Original) The saw as defined in claim 19, wherein said blade tensioning assembly comprises a carriage for translating said driven wheel along an axis parallel to a longitudinal axis of said frame.

25. (Original) The saw as defined in claim 18, where said at least one blade guide assembly comprises two blade guide assemblies spaced from each other at

Application Serial No. 10/776,838  
Date September 10, 2006  
Reply to Office Action dated August 10, 2006

Page 7 of 15

opposite ends of said throat for engaging at least one side of the continuous looped blade and twisting the continuous looped blade a predetermined angle relative to said frame.

26. (Currently Amended) A hand-held power operated band saw manipulable by hand so as to be movable in relation to a work piece for performing a cutting operation on the work piece using a closed loop saw blade having a substantially continuous cutting edge on at least one edge of the saw blade, the saw blade movable in a path defined by the closed loop during the cutting operation, comprising:

- a frame having a first end and a second end and a length greater than a width;
- a throat extending inwardly of said frame intermediate said first and second ends;
- a tensioning assembly mounted in said first end of said frame;
- a first wheel journaled to said tensioning assembly adapted to engage a portion of a continuous loop blade to be mounted thereon;
- a drive assembly mounted to the band saw;
- a second wheel journaled to said second end of said frame and coupled in drive relationship to said drive assembly, and adapted to support said portion of the continuous loop blade to be mounted thereon;
- a handle generally opposite said throat and extending from said frame intermediate said first and second ends at an angle relative to said frame; and
- a battery removably attached to and disposed on said handle with provision for electrically coupling said battery to said drive assembly.

27. (Original) The saw as defined in claim 26, further comprising a first and a second blade guide mounted on opposite sides of said throat for twisting a segment of the continuous loop blade to a predetermined angle.

Application Serial No. 10/776,838

Date September 10, 2006

Reply to Office Action dated August 10, 2006

Page 8 of 15

28. (Original) The saw as defined in claim 26, further comprising a fence attached to said frame within said throat for engaging a work piece.

29. (Original) The saw as defined in claim 26, further comprising a skirt depending around substantially all of said frame but for said throat to permit the continuous loop blade to engage a work piece.

30. (Original) The saw as defined in claim 26, wherein said frame is fixed at a predetermined angle relative to said handle.

31. (Previously Presented) The saw as defined in claim 26, wherein said battery is coupled to said handle proximate said first end of said frame.

32. (Currently Amended) The saw as defined in claim 26, wherein said battery is rechargeable having a chemistry selected from the group of nickel cadmium, nickel metal hydride hydride, lithium, and lead-acid.

33. (Currently Amended) A portable hand-held power operated band saw manipulable by hand so as to be movable in relation to a work piece for performing a cutting operation on the work piece using a closed loop saw blade having a substantially continuous cutting edge on at least one edge of the saw blade, the saw blade movable in a path defined by the closed loop during the cutting operation, comprising:

a frame having a [[a]] first and a second ends and a throat defined therein intermediate said first and second ends;

a handle extending from said frame intermediate said first and second ends and disposed at an angle other than perpendicular relative to said frame;

a battery pack detachably coupled to one of said frame and said handle;

a drive wheel assembly attached to one end of said frame; and

Application Serial No. 10/776,838  
Date September 10, 2006  
Reply to Office Action dated August 10, 2006

Page 9 of 15

a driven wheel assembly attached to an opposite end of said frame and adapted to move relative to said driven drive wheel assembly;

wherein said drive and driven wheel assemblies are adapted to receive a continuous closed loop saw blade thereon such that a portion of the continuous loop blade traverses said throat area defined by said ~~C-shaped~~ frame.

34. (Currently Amended) A method for cutting a work piece, comprising the steps of:

providing a band saw having a throat defined along one edge and a handle extending from said body at an angle relative to said body and opposite said throat area[,,];

providing a continuous-loop blade on said band saw such that a section of said continuous-loop blade traverses said throat;

grasping the handle of the saw with one hand such that the body of the saw lies at said angle relative to said handle;

energizing the saw to cause the cutting blade to rotate;

directing the saw to locate the throat adjacent the work piece; and

engaging the work piece with said cutting blade along a predetermined line to be cut.

35. (Original) The method as defined in claim 34, further comprising the step of orienting a section of said cutting blade traversing said throat to lie in a plane about parallel to a plane of said handle.

36. (Original) The method as defined in claim 34, further comprising the step of automatically breaking said cutting blade when said cutting blade is fatigued.



Application Serial No. 10/776,838  
Date September 10, 2006  
Reply to Office Action dated August 10, 2006

Page 10 of 15

37. (Original) The method as defined in claim 34, further comprising the step of breaking said cutting blade when said cutting blade is displaced a predetermined distance.

38. (Previously Presented) The method as defined in claim 34, further comprising the step of depressing a safety switch prior to energizing the band saw.

39. (Previously Presented) The method as defined in claim 34, further comprising the step of engaging the work piece with a fence depending from said body of said saw to stabilize the work piece.

40. (Currently Amended) A method for cutting a work piece with a hand-held band saw, the method comprising the step of:

a user grasping a handle extending from an intermediate portion of the band saw at an angle and approximately opposite a cutting area for the band saw such that the cutting area for the band saw is disposed laterally along an incline relative to a plane containing the handle;

engaging the work piece to be cut with the band saw blade; and  
energizing the saw by depressing a trigger in the band saw handle to cause the band saw blade to cut the work piece.

41. (Previously Presented) A method for manufacturing a hand-held band saw, comprising the steps of:

forming a saw frame having a first and a second end defining a longitudinal axis, said saw frame having a throat formed in a longitudinal edge of said saw frame intermediate said first and second ends;

forming a handle assembly extending from an opposite longitudinal edge of said saw frame and generally opposite said throat;

Application Serial No. 10/776,838  
Date September 10, 2006  
Reply to Office Action dated August 10, 2006

Page 11 of 15

mounting a drive assembly to one of said first and second end of said saw frame;

attaching a drive wheel assembly to said drive assembly;

mounting a driven wheel assembly to an opposite one of said first and second ends of said saw frame; and

providing a continuous loop blade to be supported by said drive wheel assembly and said driven wheel assembly such that a portion of said continuous loop blade traverses said throat.

42. (Previously Presented) The method as defined in claim 41, further comprising the step of mounting said driven wheel assembly to a tensioning device for moving said driven wheel assembly relative to said drive wheel assembly.

43. (Previously Presented) The method as defined in claim 41, further comprising the step of orienting said handle assembly such that a grip portion is generally parallel to said longitudinal axis.

44. (Previously Presented) The method as defined in claim 41, further comprising the step of injection molding said saw frame from a polymeric material.

45. (Previously Presented) The method as defined in claim 41, further comprising the step of injection molding said handle assembly from a polymeric material.

46. (Previously Presented) The method as defined in claim 41j, further comprising the step of injection molding at least a portion of said saw frame and at least a portion of said handle assembly in a single step.

Application Serial No. 10/776,838

Date September 10, 2006

Reply to Office Action dated August 10, 2006

Page 12 of 15

47. (Previously Presented) The method as defined in claim 41, further comprising the step of mounting a blade break assembly to said saw frame.

48. (Previously Presented) The method as defined in claim 41, wherein the step of forming said handle assembly includes inclining said handle assembly at an angle relative to said saw frame.

49. (Previously Presented) The method as defined in claim 43, further comprising the step of orienting said handle assembly relative to said saw body such that a center of gravity for said hand-held band saw is located below said grip.

50. (Previously Presented) The method as defined in claim 41, further comprising the step of providing a location on one of said handle assembly and said saw frame for mounting a DC power supply to power said hand-held band saw.

51. (New) A hand-held power operated band saw manipulable by hand so as to be movable in relation to a work piece for performing a cutting operation on the work piece with a closed loop saw blade having a substantially continuous cutting edge on at least one edge of the saw blade, the saw blade movable in a path defined by the closed loop during the cutting operation, comprising:

a frame extending predominately in a single plane;

an electric motor associated with the frame;

a drive wheel to be rotated about an axis generally perpendicular to the plane of the frame by the electric motor;

a driven wheel to be rotated about an axis generally perpendicular to the plane of the frame and mounted to the frame at a location spaced from the drive wheel, the drive wheel and the driven wheel adapted to support a closed loop saw blade thereon; and

Application Serial No. 10/776,838  
Date September 10, 2006  
Reply to Office Action dated August 10, 2006

Page 13 of 15

a handle extending at an angle other than perpendicular from the plane of the frame.

52. (New) The hand-held power operated band saw of claim 51 further comprising:

a throat defined by the frame intermediate a first end and a second end for receiving at least a portion of the work piece.

53. (New) The hand-held power operated band saw of claim 51 further comprising:

a battery pack adapted to be removably associated with an electrical circuit including a switch operable to supply power from the battery pack to the electric motor.

54. (New) The hand-held power operated band saw of claim 51, further comprising:

a battery pack positioned relative to the electric motor and relative to the handle in order to balance the band saw with respect to the handle.

55. (New) The hand-held power operated band saw of claim 51, further comprising:

a battery pack positioned relative to the electric motor and relative to the handle in order to locate a center of gravity for the band saw centrally with respect to the handle.

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**